Claims

A compound with the following

general formula (I):

5 in which:

- R1 and R2, identical or different, are chosen from among a hydrogen atom, a linear or branched lower alkyl radical of 1 to 6 carbon atoms, a fluoroalkyl radical of 1 to 9 carbon atoms and of 3 to 7 fluoride atoms,

10 _ A represents an aromatic group of one or several cycles possibly comprising one or several heteroatoms,

- B represents a possibly substituted phenyl group or a possibly substituted pyridine group.

2) a compound of formula (I) according to claim 1, 15 characterised by the fact that B represents a group with the following formula (II):

$$R7$$
 Y_{1}
 $R5$
 $R6$
 $R7$
 $R6$

in which:

- Y_1 is a carbon atom in order to form a phenyl nucleus or a nitrogen atom in order to form a pyridine nucleus,

- R3, R4, R5, R6 and R7, either identical or different, are chosen from among: an atom of hydrogen, an atom of halogen and more particularly of fluoride, chloride and bromide, a group of formula -OH, -OR8 or -OCOR9, in which R8 and R9 represent a linear or branched lower alkyl radical of 1 to 6 carbons, an amino group -NH $_2$ or -N(r, r') in which r and r', either identical or different, represent a linear or branched lower alky radical, an aryl radical, or a heterocycle in which r and r', taken together, form a heterocycle of variable size, preferably in the para position.

- 3) A compound of formula (I) according to claim 2, characterised by the fact that R3 is a group of formula -OR8 and at least two of the substituents R4, R5, R6 and R7 represent a hydrogen atom.
- 4) A compound of formula (I) according to one of claims 2 or 3, characterised by the fact that Y_1 is a carbon atom.
- 5) A compound of formula (I) according to any of claims 1 to 4, characterised by the fact that A represents a group with the following formula (III):

$$X_{2}$$

$$X_{1}$$

$$X_{2}$$

$$X_{1}$$

$$X_{2}$$

$$X_{1}$$

$$X_{2}$$

$$X_{1}$$

$$X_{2}$$

$$X_{3}$$

$$X_{4}$$

$$X_{2}$$

$$X_{3}$$

- X_1 is chosen from among:

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. an oxygen atom and in this case the group of formula (III) is a 2-furanyl or 3-furanyl nucleus as a function of the position of the chain $-(X_4)_n\text{-acyl-hydrazide}$ on the α or β carbons of this heterocycle,

. a sulphur atom and in this case, the group of formula (III) is a 2-thiophene or 3-thiophen nucleus as a function of the position of the chain $-(X_4)_n\text{-acyl-hydrazide}$ on the α or β carbons, this sulphur atom being capable of bearing an oxygen atom in order to form a sulphoxide or two oxygen atoms in order to form a sulphone.

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1.0

1.5

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. a nitrogen atom and in this case, the group of formula (III) is a 2-pyrrol or 3-pyrrol nucleus as a function of the position of the acyl-hydrazide chain on the α or β carbons of this heterocycle, this nitrogen atom being capable of bearing a hydrogen atom, a lower alkyl radical of 1 to 6 carbon atoms, a fluoroalkyl radical with 1 to 6 carbon atoms and 3 to 7 fluoride atoms, an acyl radical -COR10 in which R10 represents a linear or branched alkyl chain of 1 to 6 carbons or an aryl or aralkyl radical,

- X_2 and X_3 , either identical or different, are chosen from among:
- . a hydrogen atom, a linear or branched lower alkyl chain of 1 to 6 carbon atoms, a fluoroalkyl radical with 1 to 6 carbon atoms and 3 to 7 fluoride atoms,
 - . a halogen atom, preferentially a fluoride, chlorine or bromide atom,
- . a nitro $-NO_2$ group, an amino $-NH_2$ group or a -N(r, r') group, in which r and r', either identical or different represent a linear or branched lower alkyl radical, an aryl radical, or a heterocycle of variable size,

or furthermore X_2 and X_3 are included in an aromatic benzenic or aza-benzenic type cycle if this cycle comprises a nitrogen atom, in order to form an aromatic benzefuran heterocycle when X_1 is an oxygen atom, a benzopyrrol nucleus

when X_1 is a nitrogen atom either free or substituted as above, a benzothiophene nucleus when X_1 is a sulphur atom either free or substituted as above or furthermore a pyridino type nucleus if an intracyclic nitrogen atom is present,

- n is 0 or 1,

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- X_4 , if present, represents a -CH₂-, -OCH₂-, or -CH=CH-group.
- 6) A compound according to claim 5, characterised by the 10 fact that it is chosen from the group comprising:

N' - [(1E) - (2-hydroxy-4, 6-dimethoxyphenyl) methylene]-1-benzothiophene-2-carbohydrazide,

- * (2Z)-3-(2-furyl)-N'-[(1E)-(2-hydroxy-4,6-dimethoxyphenyl) methylene] acrylohydrazide,
- * N'-[(1E)-(2-hydroxy-4,6-dimethoxyphenyl)methylene]-5-methylthiophene-2-carbohydrazide,
 - * 2-furancarboxylic acid (2-hydroxy-4,6-dimethoxy-benzylidene)-hydrazide (designated CGP02-07),
 - * (1H-indol-3-yl) acetic acid (2-hydroxy-4,6-dimethoxybenzylidene)-hydrazide,
 - * benzo[b]thiophene-2-carboxylic acid (3,5-dibromo-2-hydroxy-benzylidene)-hydrazide.
 - 7) N' [(1E) (2-hydroxy-4, 6-dimethoxyphenyl) methylene]-1-benzothiophene-2-carbohydrazide.
- 8) A compound of formula (I) according to any of claims 1 to 4, characterised by the fact that A represents a group with the following formula (V):

$$(X_4) m \qquad (V)$$

in which:

- n is 0 or 1,

- X_4 , if present, represents a -CH₂-, -OCH₂-, or -CH=CH- group.

- R11 and R12, either identical or different, in the *ortho*, meta or para positions in relation to the bond with -X₄- or in relation to the bond with -CO- when n is 0, are chosen from among: a linear or branched-chain lower alkyl or aralkyl group of 1 to 6 carbon atoms or a fluoroalkyl radical with 1 to 6 carbon atoms and 3 to 7 fluoride atoms, a -OH, -OR13 or R13 radical represents a linear or branched-chain lower alkyl group of 1 to 6 carbon atoms, a halogen and more particularly of fluoride and specifically in this case, when R11 and R12 are fluoride atoms, they are in *ortho* on either side of the bond with -X₄- or the remainder CO-,

where R12 represents a hydrogen atom and R11 represents a type $-SO_2NH_2$ sulphonamide group, in para in relation to the bond with $-X_4-$ or the remainder -CO-,

- or furthermore R11 represents a hydrogen atom and R12 represents a -Ophenyl group in ortho in relation to the bond with $-X_4-$ or the remainder -CO-,
- .9) A compound of formula (I) according to claim 8, characterised by the fact that it is chosen from the group comprising:
 - * (4-dimethylamino-N'-[(1E)-(2-hydroxy-4,6-dimethoxyphenyl)methylene]benzohydrazide,

- * 2-phenethylbenzoic acid (2-hydroxy-4,6-dimethoxy-benzylidene)-hydrazide,
- * N-[3-2-hydroxy-4,6-dimenthoxy-benzylidene-hydrazinocarbonyl)-phenyl]-propionamide,
- * (3-chloro-phenoxy)-acetic acid (2-hydroxy-4,6dimethoxybenzylidene)-hydrazide,
 - * 2-phenoxy-benzoic acid (2-hydroxy-4,6-dimethoxybenzylidene)-hydrazide,
- * 2,6-difluorobenzoic acid (2-hydroxy-4,6-10 dimethoxybenzylidene)-hydrazide,
 - * 4-trifluoromethylbenzoic acid (2-hydroxy-4,6-dimethoxy-benzylidene)-hydrazide.
 - * 3,4-dimethoxybenzoic acid (4-diethylamino-2-hydroxy-benzylidene)-hydrazide
- 15 10) A compound of formula (I) according to any of claims 1 to 4, characterised by the fact that A represents a group with the following formula (VII):

in which:

- R15 is chosen from among an atom of hydrogen, an atom of halogen and more particularly of fluoride, chloride or bromide, a group of formula -OH, -OR16, in which R16 represents a linear or branched chain lower alkyl radical of

1 to 6 carbons or a fluoroalkyl radical with 1 to 6 carbon atoms and 3 to 7 fluoride atoms and more particularly a trifluoromethyl radical CF_3 , R15 being positioned at one of the four remaining free sites of the 3-oxo-3, 4-dihydrobenzothiazin-yl bicyclic aromatic part,

- R14 represents a linear or branched alkyl radical of 1 to 6 carbons and more particularly a cyclopropyl radical.
- 11) A compound of formula (I) according to claim 10, characterised by the fact that R14 is in position 2 of the quinoline group and A represents a group of the following formula (VII'):

in which R14 and R15 have the same meaning as in claim 10.

- 12) A compound of formula (I) according to claim 10,

 15 characterised by the fact that it is 2-cyclopropylquinoline4-carboxylic acid (2-hydroxy-4,6-dimethoxy-benzylidene)hydrazide.
- 13) A compound of formula (I) according to any of claims 1 to 4, characterised by the fact that A represents a group of the following formula (IX):

R17
$$(X_4)$$
n (IX)

in which:

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- X_1 and X_4 have the same meaning as above,
- n is 0 or 1,
- R is chosen from among:
- * a hydrogen atom, a linear or branched lower alkyl radical of 1 to 6 carbon atoms, a fluoroalkyl radical of 1 to 6 carbon atoms and 3 to 7 fluoride atoms,
 - * a halogen atom, preferentially an atom of fluoride, chlorine or bromide,
- * a group OR' for which linear or branched lower R' of 1 to 6 carbon atoms, a fluoroalkyl radical of 1 to 6 carbon atoms and 3 to 7 fluoride atoms.
 - 14) A salt of a compound according to any of the preceding claims with a pharmaceutically acceptable acid.
- 15) A pharmaceutical composition comprising as an active agent at least one compounds according to any of claims 1 to 14.
 - 16) A composition according to claim 15, characterised by the fact that it is intended for treatment and/or prevention of diseases associated with lipid metabolism disorders.
- 20 17) A composition according to any of claims 15 or 16, characterised by the fact that it is intended for treatment and/or prevention of cardiovascular diseases.
- 18) A composition according to any of claims 15 to 17, characterised by the fact that it is intended for treatment and/or prevention of a disease chosen from the group including atherosclerosis, arterial restenosis, obesity, type II diabetes mellitus, cerebral ischaemia, hepatic steatosis, hypercholesterolaemia, hypertriglyceridaemia,

dyslipoproteinaemia, chylomicronaemia, lipodystrophy, hyperglycaemia and atherosclerosis.

19) Use of a compound according to any of claims 1 to 14 for preparation of a pharmaceutical composition according to any of claims 16 to 18.

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